Power PCB Relay RT Inrush Power (Continued)

Coil Data (continued),

bistable coils	1 coil	2 coils
Magnetic system	polarized, bistable	
Coil voltage range	3 to 24VDC	
Operative range, IEC 61810	2	
Limiting voltage, % of rated coil voltage	120%	150%
Min./Max. energization duration	30ms/1min at <10% duty factor	
Coil insulation system according UL1446	class F	

Coil Data — RT.3T / RTS3L

Coil versions, bistable

Coil code	Rated voltage VDC	Set voltage VDC	Reset voltage VDC	Coil resistance Ω±10%	Rated coil power mW
Coil versions, bistable 1 coil					
A03	3	2.1	1.7	21	429
A12	12	8.4	6.6	360	400
A24	24	16.8	13.2	1440	400
Coil versions, bistable 2 coils					
F03	3	2.1	1.7	15	600
F12	12	8.4	6.6	240	600
F24	24	16.8	13.2	886	650

All figures are given for coil without pre-energization, at ambient temperature +23°C.
Other coil voltages on request.

Coil Data — RTSET

Coil versions, bistable

| Coil code	Rated voltage VDC	Set voltage VDC	Reset voltage VDC	Coil resistance Ω±10%	Rated coil power mW
Coil versions, bistable 1 coil					
A03	3	2.1	1.8	21	429
A12	12	8.4	7.2	360	400
A24	24	16.8	14.4	1440	400
Coil versions, bistable 2 coils					
F03	3	2.1	1.8	15	600
F12	12	8.4	7.2	240	600
F24	24	16.8	14.4	886	650

All figures are given for coil without pre-energization, at ambient temperature +23°C.
Other coil voltages on request.
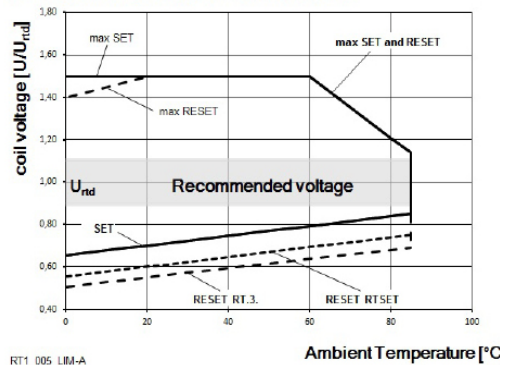
Bistable coils - operation

Version	1 coil		2 coils		
Coil terminals	A1	A2	A1	A3	A2
Operate	+	-		+	-
Reset	-	+	-		+

Contact position not defined at delivery

Coil operating range: 1 bistable coil

RT1_004_LIM-A
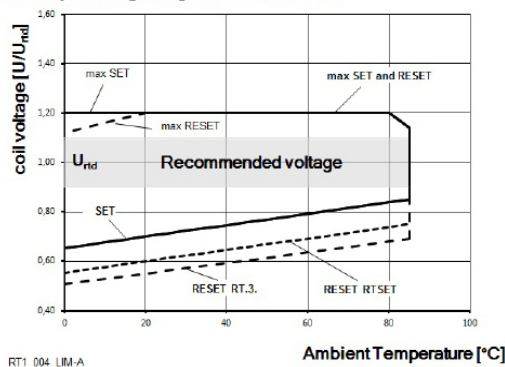
Coil operating range: 2 bistable coils

RT1_005_LIM-A

Insulation Data

Initial dielectric strength	
between open contacts	1250V$_{rms}$
between contact and coil	5000V$_{rms}$
Clearance/creepage	
between contact and coil	≥10/10mm
Material group of insulation parts	IIIa
Tracking index of relay base	PTI 250V

Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter

Ambient temperature RT.3T / RTS3L	
monostable DC coil	-40 to 105°C
bistable 1 coil	-10 to 105°C
bistable 2 coils	-40 to 105°C
Ambient temperature RTSET	
monostable DC coil	-40 to 85°C
bistable 1 coil	-10 to 85°C
bistable 2 coils	-40 to 85°C

	RT.3T / RTSET	RTS3L
Category of environmental protection IEC 61810	RTII - flux proof	
RTIII - wash tight available upon request		
Vibration resistance (functional), monostable version	10g	20g
Shock resistance (destructive)	100g	
Terminal type	PCB-THT, plug-in[2]	
Weight, without / with test tab	14/16g	14g/-
Resistance to soldering heat THT IEC 60068-2-20	270°C/10s	

	RT.3T / RTSET	RTS3L
Packaging/unit		
without test tab	tube/20 pcs., box/500 pcs.	tube/20 pcs., box/500 pcs.
with test tab	tray/25 pcs., box/100 pcs.	- -

2) RTT3T or bistable 2 coil version: PCB mounting only. See Accessories.

Accessories RTS.

For details see datasheet — Accessories Industrial Power Relay RT
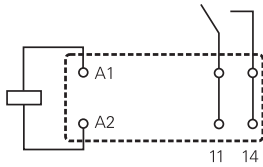Socket available for 1 coil version only.

NOTE: indicated contact ratings and electrical endurance data for direct wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.
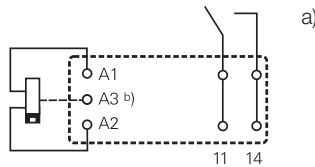
Power PCB Relay RT Inrush Power (Continued)

Terminal assignment
Bottom view on solder pins

monostable version

A1
A2
11 14

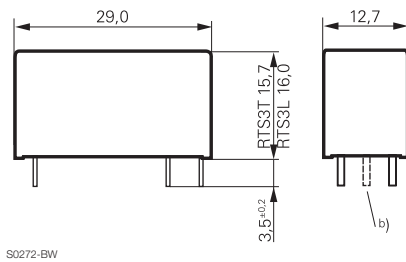bistable version

A1
A3 b)
A2
11 14

a)

a) Indicated contact position during or after coil
   energization with reset voltage.

b) for 2 coil version only

Dimensions / PCB layout

version without test tab

29,0

12,7

RTS3T 15,7
RTS3L 16,0

3,5±0,2

S0272-BW

16A, pinning 5mm

Ø1,3⁺⁰·¹   2,52*

7,5±0,2

2,52

5,04±0,15

20,3±0,2

22,65±0,2
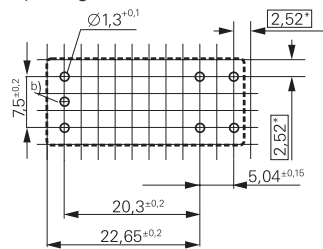
b) for 2 coil version only

version with test tab

7,1

7,1

30

13,7

2,6

23,6

25,6

3,5±0,2

Ø1,3⁺⁰·¹   2,52*

7,5±0,2

2,52

5,04±0,15

20,3±0,2

23,15±0,2
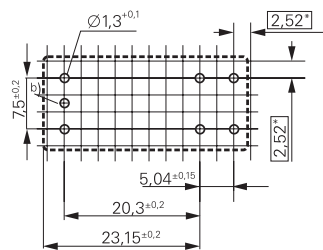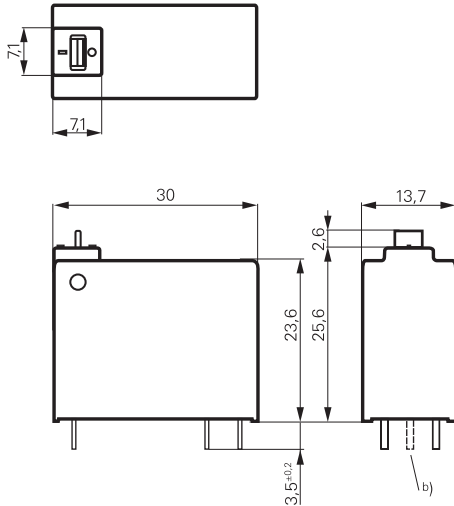
*) With the recommended PCB hole
   sizes a grid pattern from 2.5mm to
   2.54mm can be used.

Power PCB Relay RT Inrush Power (Continued)

Product code structure

						Typical product code	**RT**	**S**	**3**	**T**	**A12**

Type				
RT	Power PCB Relay RT1 Inrush Power			
Version				
S	Without test tab	**T**	With test tab (manual operator) for version ‚RTT3T' bistable coil only	
Contact configuration				
3	1 form A (NO) contact	**E**	1 form A(NO) ‚electronic ballast' contact	
Contact material				
L	AgSnO$_2$	**T**	Tungsten (W) pre-make + AgSnO$_2$	
Coil				
	Coil code: please refer to coil versions table			
Version				
Blank Standard Version				
WG Product in accordance to IEC 60335-1				

Product code	Version	Contacts	Contact material	Coil version	Coil	Version	Part number
RTS3L005	Without test tab,	1 form A (NO)	AgSnO$_2$	Monostable	5VDC	Standard	1-1415898-8
RTS3L006	16mm high	contact			6VDC		4-1415898-4
RTS3L012					12VDC		1-1415898-9
RTS3L024					24VDC		1-1415898-4
RTS3LA12				Bistable, 1 coil	12VDC		2-1415898-3
RTS3LF12				Bistable, 2 coils	12VDC		2-1415898-5
RTS3LF24					24VDC		2-1415898-6
RTS3T005	Without test tab,		W pre-make + AgSnO$_2$	Monostable	5VDC		1-1415898-6
RTS3T012	15.7mm high				12VDC		1415898
RTS3T024					24VDC		1415898-1
RTS3L048					48VDC		2-1415898-1
RTS3T048					48VDC		1-1415898-1
RTS3T060					60VDC		1-1415898-2
RTS3TA05				Bistable, 1 coil	5VDC		1-1415898-5
RTS3TA06					6VDC		3-1415898-1
RTS3TA12					12VDC		1415898-2
RTS3TF03				Bistable, 2 coils	3VDC		1415898-4
RTS3TF12					12VDC		1415898-5
RTS3TF24					24VDC		1415898-6
RTT3TA12	With test tab,			Bistable, 1 coil	12VDC		1415898-7
RTT3TF24	23.6mm high			Bistable, 2 coils	24VDC		1-1415898-0
RTS3L012WG	Without test tab,	1form A (NO)	AgSnO$_2$	Monostable	12VDC	IEC60335-1	2-1415898-7
RTS3L024WG	15.7 mm high	contact			24VDC	compliant	5-1415898-1
RTS3T012WG			W pre-make + AgSnO$_2$		12VDC		5-1415898-6
RTS3TA24WG				Bistable 1 coil	24VDC		4-1415898-7
RTSET005	Without test tab,	1 form A (NO)	W pre-make + AgSnO$_2$	Monostable	5VDC	Standard	7-1415898-7
RTSET012	15.7mm high	contact			12VDC		7-1415898-9
RTSET024					24VDC		8-1415898-0
RTSETA12				Bistable, 1 coil	12VDC		8-1415898-6
RTSETA24					24VDC		8-1415898-7
RTSETF12				Bistable, 2 coils	12VDC		9-1415898-1
RTSETF24					24VDC		9-1415898-3

This list represents the most common types and does not show all variants covered by this datasheet.
Other types on request.